Page 1

March 16, 2010 10:25:47 AM

Item ID:

D4086-210

Accept



Setup Start

Stop



**Revision ID:** 

Item Name:

Placard, Max Load

**Start Date:** 

Required Date: 3/22/10

3/16/10

QC:

**Start Qty: 10.00** 

Req'd Qty: 10.00



**Cust Item ID:** 

**Customer:** 

Reference:

Approvals:

Process Plan: ("

Date: 10/3/16 Tooling:

Date:

Run

Start

Stop

Sequence ID/ Work Center ID

**Draw Nbr** 

Operation

Revision Nbr

Α

Description

Set Up/ **Run Hours** 

SPC (Y/N):

Draw Number Draw Rev.

Date:

Plan Accept Code Qty

Reject Qty

CX 1013/16

Reject Number Stamp

D4086 100

Purchasing

Purchasing

PURCHASING

Memo

Fabricate as per Dwg D4086 Possible Supplier: Studio Lettrage Material release note is required

110

Receive & Inspect for Damage & Mat'l Certs

0.00



Packaging Packaging

Memo

QC6- Inspect dimensions to drawing

120

Quality Control

Memo

0.00

0.00

0.00

Ensure Material Release Note is attached

## **Dart Aerospace Ltd**

N/O:			WC	RK ORDER CHANG	ES			• • • • • • • • • • • • • • • • • • • •	
DATE	STEP	PRO	PROCEDURE CHANGE By Date					Approval Chief Eng / Prod Mgr	Approval QC Inspector
	ļ								
Part No	·	PAR #:	Fault Cate	jory:	NCR: Yes	No <b>DQ</b> A	<b>4</b> :	Date:	
		solution:							
NCR:				ER NON-CONFORMA					
		Description of NC	Description of NC Corrective Action Section B						
DATE	STEP	Description of NC Section A	Initial Action Description Chief Eng Chief Eng		Sign & Date	Verification Section C		Approval Chief Eng	Approval QC Inspector
									-
								:	
	1 1		i I		1	i		l	I .

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

#### Work Order ID 56978



Page 2

March 16, 2010 10:25:47 AM

Item ID:

D4086-210

Accept



Setup Start

Stop



**Revision ID:** 

Item Name:

Placard, Max Load

**Start Date:** 

3/16/10

**Start Qty: 10.00** 

Req'd Qty: 10.00



**Cust Item ID:** 

**Customer:** 

Draw

Number

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Start Run

Required Date: 3/22/10

QC:

Date:

SPC (Y/N):

Set Up/

**Run Hours** 

Date:

Stop

Qty

Sequence ID/ **Work Center ID** 

130

Packaging

Packaging

Operation Description

Identify as per dwg & Stock Location:

Memo

Memo

0.00

0.00

Plan Draw Accept Rev. Code Qty

Reject Reject Number Stamp

Insp.

140

QC

**Quality Control** 

QC21- Final Inspection - Work Order Release

0.00

0.00

10/03/24 H

## **Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES										
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
Part No	•	PAR #:	Fault Cat	egory:	NCR: Yes	s No D	DQA:	Date:	L			
		esolution:										
NCR:		T 100 100 100 100 100 100 100 100 100 10		DER NON-CONFORMA				· /- · · ·				
DATE	STEP	Description of NC	Description of NC Corrective Action			Section B Verif			Approval			
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Dat	l&   S	ection C	Approval Chief Eng	QC Inspector			
	1	1	1 1		i	l l		ŀ	i			

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

#### **Picklist Print**

March 16, 2010 10:25:47 AM

Work Order ID: 56978

Parent Item:

D4086-210

Parent Item Name: Placard, Max Load

**Comments:** 

IPP Rev:A new issue DD 10.03.16 verified by:EC

**Start Date: 3/16/10** 

Required Date: 3/22/10

Page 1

**Start Qty: 10.00** 

Required Qty: 10.00

	eplacement tem ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seg ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D4086-210P		Purchased	No			110	Each	0.0000	10.0000	Pop 1	12/3	(10)

Placard, Max Load

## **Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES										
DATE	STEP	PRO	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ/	<b>A:</b>	Date: _				
	R	esolution:	Dispositio	n:	QA: N/C Cld	sed:		Date:				
NCR:		V	VORK ORD	ER NON-CONFORMA	NCE (NCR	)						
DATE	STEP	Description of NC	Initial	Corrective Action Section	n B Sign &	Verific		Approval	Approval			
		Section A	Chief Eng	Action Description Chief Eng	Date	Section	on C	Chief Eng	QC Inspector			
	!								:			

NOTE: Date & initial all entries

MAXIMUM DISTRIBUTED LOAD XXX LB / YYY KG TOTAL 32 lbs/ft2 (156 Kg/m2) 1.80 REFER TO FMS-D350-607 OR FMS-D355-607 FOR OTHER LOADING LIMITATIONS P/N D4086-XXX - 0.08 0.09 R0.20 TYP

B D4086-XXX PLACARD, MAX LOAD (XXX = ALLOWABLE WEIGHT)

ſ	PART NUMBER	LOAD	]
	D4086-210	210 lb/ 95 kg	┝
	D4086-220	220 lb / 100 kg	١
ı	D4086-232	232 lb/ 105 kg	١
Ī	D4086-243	243 lb/ 110 kg	1

SHOP COPY **RETURN TO** ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE WORK ORDER

Α	NEW IS	SUE		JPH	10.03.08		
REV.		DESCRIPTION		BY	DATE		
DESIGN	1	JPH	DART AEROSPACE LTD				
DRAWN	1	J₽H	HAWKESBURY, ONTARI	O, CANA	DA		
CHECKED		ا گ	DRAWING NO.		REV. A		
MFG. A	PPR.	_	D4086		SHEET 1 OF 1		
APPRO	VED	W.	TITLE		SCALE		
DE APPR.			PLACARD, MAX LOAD				
DATE 10.03.08			COPYRIGHT © 2010 BY DART A THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL MID IS SUPPLIED NOT TO BE USED FOR ANY PURPOSE OF COPYED OR COMMUNICATION WRITTEN PERMISSION FROM DART AD	ON THE EXPRE	SS CONDITION THAT IT IS		

NOTES:
1) MATERIAL: RED LETTERS WITH WHITE BACKGROUND AND ADHESIVE BACK.
MANUFACTURED FROM 3M, 7 MIL MASKING FILM #8522CP OR
AVERY IPM #2031

2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A

6) IDENTIFICATION: N/A

D

7) WEIGHT: N/A
8) PART NUMBER = D4086-MAX DISTRIBUTED WEIGHT IN POUNDS (lbs) OF THE BASKET.
EXAMPLE: D4086-210 IS A BASKET WITH MAX DISTRIBUTED WEIGHT OF 210 POUNDS (lbs).

8



Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7

Tel: 613 632 9577 Fax: 613 632 1053

#### \*\*\*PO REPRINT\*\*\*

#### Purchase Order ID PO11514

Purchase Order Date 3/16/10 PO Print Date 3/23/10

Page Number 1 of 2

Order From:

VC-STU001

STUDIO DE LETTRAGE 2001 210 MAIN WEST HAWKESBURY, ON K6A 2H6

CA

**Contact Name** 

Vendor Phone

613 632 5449

Vendor Fax

613 632 9491

Vendor Account Nbr

Buyer

Chantal Lavoie

RECIBELL

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30 CAD

Currency

**FOB** 

Ship To:

DART AEROSPACE LTD

1270 ABERDEEN

HAWKESBURY, ON K6A 1K7

CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ — Mfg ID	Req Date/ Taxable_	Req. Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	O4086-210P	Placard, Max Load	3/23/10 Yes	10.00 Each	Yours ppd	\$7.5000	\$75.00
		Special Inst:	B46978 SO MATERIAL WHITE BAC ADHESIVE MANUFAC	: RED LETTERS WIT CKGROUND AND BACK. TURE FROM 3M, 7N TILM #8522CP OR			
2 I	D4086-220P	Placard, Max Load	3/23/10 Yes	10.00 Each	Yours ppd	\$7.5000	\$75.00
		Special Inst:	AS ABOVE B56979				
3 [	D4086-232P	Placard, Max Load	3/23/10 Yes	10.00 Each	Yours ppd	\$7.5000	\$75.00
		Special Inst:	AS ABOVE				

B56980



210 MAIN W., HAWKESBURY, ONT. K6A 2H6

Tel.: 613 632-2001 Fax: 613 632-9491

www.studiolettrage.com

INVOICE / FACTURE

No.:

13561

DATE:

03/23/2010

PAGE

1 of 1

Re: Quote No. 8461

VENDU À: SOLD TO:

K6A 1K7

Dart Aerospace Ltd 1270 Aberdeen

Hawkesbury, Ontario

LIVRÉ À: SHIPPED TO:

Dart Aerospace Ltd

Hawkesbury, Ontario

ITEM ARTICLE	QTY QYÉ	UNIT UNITÉ	DESCRIPTION	GST TPS	PST TVP	UNIT PRICE PRIX UNITÉ	AMOUNT MONTANT
	(-	15 10 10 10 10 10	D4085 set up D4086 210P D4086 220P D4086 232P D4086 243P Printing  E - GST @ 5% G - GST @ 5%; PST @ 8% GST	шшшшшС		3.3333 5.0000 5.0000 5.0000 5.0000 125.0000	50.00 50.00 50.00 50.00 50.00 125.00
			PST Exempt: #6122-5207				
			Scoloslay				
Studio de Lettra	age GST: 7	#869034678RP001				TOTAL	
PO 11514	1						393.75

Sold By:

#### **Product Bulletin 8522**

**3M** 

Release F, Effective January 2003 Black bar in margin indicates a change

# Scotchcal <sup>™</sup> Opaque Imaging Media 8522

### Description

This media is specially formulated to dry quickly after printing. Production of outdoor weatherable and long-term indoor durable graphics is now easier than ever. Its changeable adhesive allows easy removal for up to one year.

#### Advantages

- Optimized for use with selected Epson Stylus Proprinters and Epson Archival inks.
- Optimized for use with selected HP DesignJet Printers and HP DesignJet Ink System UV or HP83UV Color Ink System
- For making opaque, laminated graphics that are outdoor weatherable and long-term indoor durable
- Media:
  - For opaque (reflective) graphics
  - Changeable, easy to remove from warranted substrates up to 1 year later
  - Dries quickly after printing so the overlaminate can be applied almost immediately
  - Low slippage paper liner for superior tiling
- Overlaminates:
  - Provide additional UV (ultraviolet) and physical protection for making weatherable finished graphics
  - Available in luster and matte gloss
  - Adhesive allows for heat-assisted or cold-temperature lamination

#### **Applications and Uses**

3M Scotchcal Changeable Opaque Imaging Media 8522 is intended only for ink jet printing and for use with the listed Compatible Products and Equipment and the following applications. Any other application is NOT warranted by 3M or covered by the worldwide 3M MCS Warranty unless 3M gives its prior written approval for the application.

- First surface images (the image is on top of the film) for opaque posters and signs, including:
  - Graphics for vans, personal vehicles, trucks and buses
  - Novelty posters
  - Retail and point-of-purchase displays
  - Information graphics such as maps and directories
  - Entertainment promotions in museums, zoos, parks, theatres, sports venues
  - Education and presentation graphics

- Legal and courtroom exhibits
- For flat or simple curved surfaces, with or without rivets, used in vertical (± 10°) applications

#### Limitations of End Uses

The following uses and applications are specifically NOT warranted.

- Fleet applications in areas that use salt for winter road maintenance
- Application to non-warranted substrates, including wallboard
- Applications subjected to gasoline vapors or spills
- Application to corrugated or highly irregular surfaces or sharply raised areas
- Graphics applied to stainless steel, including stainless steel vehicles
- On flat surfaces with rivets, tenting of 4 to 10 mm around rivets may be expected; rivets may be cut around to eliminate tenting.

Note: Standard ink jet technology is water based. Waterbased chemistry is susceptible to the extremes of heat and humidity. This is a factor in most product constructions on the market. Read the Fabrication. Shelf Life and Storage sections in this bulletin. Staying in the middle of these ranges always provides optimum performance.

### **Compatible Products and Equipment**

#### Thermal Ink Jet Printing Systems

- Epson Stylus Pro 9500, Stylus Pro 10000 printer
  - Epson Archival Inks
- Epson Stylus Pro 10600 printer
  - Epson Archival Inks
- HP DesignJet Printers 2000 and 3000 series
  - HP DesignJet Ink System UV (pigment-based ink)
- HP DesignJet Printers 5000 series
  - HP83UV Color Ink System

#### Overlaminates (required)

- 3M Luster Overlaminate 8519 (semi-gloss)
- 3M Matte Overlaminate 8520

Note: For the full product names of the 3M products listed on this page, please see page 1.

## Warranted Substrates

Media 8522 is warranted for use on the following rigid substrates.

Some substrates may "out-gas", resulting in tiny bubbles throughout the surface of the graphic. For maximum performance, be sure the substrate you select is properly cleaned and prepared as recommended by the manufacturer. See Instruction Bulletin 5.1 for additional information.

- Alodine (anodized aluminum)
- Automotive panels (automotive painted steel)
- Fruehauf (painted aluminum)
- FRP (fiberglass reinforced plywood)
- Imron 6 (polyurethane-painted metal panel)
- Acrylic
- Sintra " board

### Test and Approve Non-warranted Substrates Before Use

Media 8522 is not warranted for any substrate other than those listed above. If you want to use it for other substrates, 3M recommends that you test and approve the media for both adhesion and removal characteristics.

## Characteristics

Characteristic	Description
Media	7 mil, white, opaque graphic film
l iner	Low-slippage, lay flat paper
Adhesive	Changeable, pressure sensitive
Thickness (media and adhesive)	7.5 to 8 mil (nominal)
Application substrates	See Warranted Substrates, above
Application surfaces	Flat or simple curved surfaces, with or without rivets, used in vertical (± 10°) applications (no corrugations)
Application temperature range	28° to 110°F (-2° to 43°C) (air and surface)
Roll sizes	36" x 45 feet (914 mm x 13.5 m) 54" x 45 feet (1372 mm x 13.5 m)

# How to Become a 3M Ink Jet Registered Fabricator

Only 3M Thermal Ink Jet Registered Fabricators are eligible to offer 3M MCS warranted graphics. In order to become certified, a fabricator must complete the requirements as specified in the 3M Ink Jet Graphics Registered Fabricator Reference Manual located on the 3M website at www. scotchprint.com

# **Effective Performance Life**

To obtain the warranty given below, the graphics must be made according to 3M's recommendations which are detailed in the Warranty and Limited Remedies on page 3. Also see the section, Removability.

### **Warranted Durability**

Media 8522	Epson Pr	inters	HP Printers			
with	Outdoor	Indoor	Outdoor	Indoor		
THE RESERVE OF THE PARTY OF THE	2 years	5 years	3 years	5 years		

## Removability

Imaging media 8522 is removable from warranted substrates for 1 year without the aid of chemical strippers or accessories. Refer to Instruction Bulletin 4.23 for additional information.

### **Fabrication**

Graphics must be made according to 3M's recommendations which are detailed in the Warranty and Limited Remedies on page 3.

See Instruction Bulletin 4.23 for detailed fabrication, printing and mounting information.

# **Graphic Construction Options**

### Opaque (Reflective) Graphics

Opaque graphics made with imaging media 8522 require an overlaminate and an opaque substrate.

Viewer/Light Source	
	Overlaminate 8519, 8520 Adhesive on bottom
	Imaging Media 8522 Image on top; adhesive on botto
	Opaque Substrate

Note: For the full product names of the 3M products listed on this page, please see page 1.

# Shelf Life and Storage

- 3M " Scotchcal " Changeable Opaque Imaging Media 8522 has a shelf life of one year.
- Storage conditions (new and partially used rolls). For optimum performance, use the middle of these ranges:
  - Original packaging, including plastic wrap
  - Relative humidity of 20% to 80%
  - Temperature of 33° to 104°F (0° to 40°C)
  - Away from direct sunlight
  - Do not stack unprotected rolls or lay sharp or heavy objects on them.

# Health and Safety

## 

When handling any chemical products, read the manufacturers' container labels and the Material Safety Data Sheets (MSDS) for important health, safety and environmental information.

To obtain MSDS sheets for 3M products:

- By fax, call 1-800-364-0768 in the US and Canada or 1-650-556-8417 for all other locations.
- Electronically, visit us at http://www.3M.com/msds.
- By mail, or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.

When using any equipment, always follow the manufacturers' instructions for safe operation.

# **Warranty and Limited Remedies**

## 3M MCS Warranty for Graphics Produced on HP DesignJet Printers and Epson Stylus Pro Printers

The following is made in lieu of all other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose: We warrant graphics produced by a 3M Ink Jet Registered Fabricator made with imaging media 8522, printed on an approved HP thermal ink jet printer according to HP's recommendations or Epson Stylus Pro printer according to Epson's recommendations. overlaminated with 8519 or 8520, and applied to a Warranted Substrate according to 3M's recommendations. These

3M Canada

P.O. Box 5757

London, Ontario

Canada NoA 4T1

1-800-265-1840

Fax 519-452-6245

graphics are covered against failure caused by ultraviolet light, temperature extremes, pollution, and other elements.

If a graphic fails to perform in accordance with 3M product specifications within this time frame, 3M will replace the materials at no charge. These remedies are exclusive. In no case shall 3M be liable for any direct, indirect, or consequential damages, including any labor charges.

# 3M Related Literature

Listed below is related 3M technical literature that may be of interest. You may view and print these Bulletins from our Web site at www.scotchprint.com, or order them via our Faxon-Demand (FOD) system. Call one of these phone numbers to order the desired bulletins, and specify the FOD document number provided in the chart.

United States or Canada: 1-800-364-0768 International: 1-651-732-6506

International: 1-651-732-0300	Bulletin No.	FOD No.
Subject		
Product Bulletins	8519/8520	4524
3M Scotchcal Overlaminate 8519 and	85177012	
8520	<u> </u>	
Instruction Bulletins	1.22	6523
Making thermal ink jet graphics	4.23	7001
Application, substrate selection, preparation and substrate-specific application techniques	5.1	; /(K/)
Merenties		9503
Worldwide 3M MCS Warranty Pack (includes all Commercial Graphics MCS W		
Worldwide 3M MCS Warranty Over	view-Folder	9504
71111		

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### **Bulletin Change Summary**

The Epson Stylus Pro Printers 9500, 10000 10600, and Epson Archival Inks have been added to this bulletin. Additional changes resulting from this addition are marked with black bars in the margin.

#### 3M

Commercial Graphics Division

3M Center, Building 220-6W-06 PO Box 33220 St. Paul, MN 55133-3220 USA General Info 1-800-374-6772 fechnical Info (1-800-328-3908)

Pax 1-651-736-4233 Fax on-Demand, 1-800-364-0768 US/Canada or 1-651-732-6506 International Fax-on-Demand document: 4506 www.scotchprint.com

3M México, S.A. de C.V.

Av. Santa Fe No. 55 Col Santa Fe, Del Alvaro Obregón México, D.F. 01210 52-55-52-70-04-00 Fax 52-55-52-70-22-77

3M Puerto Rico, Inc. Puerto Rico Industrial Park P.O. Box 100 Carolina, PR (X0986-0100) 787-620-3000 Fax 787-750-3035

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